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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/098,567	03/18/2002	Kyoko Makino	220962US2S	3188

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EXAMINER

RIES, LAURIE ANNE

ART UNIT PAPER NUMBER

2176

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/098,567	Applicant(s) MAKINO ET AL.	
	Examiner Laurie Ries	Art Unit 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2005.
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-30 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 16-30 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 11 June 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This action is responsive to communications: amendment, filed 9 May 2005, to the original application filed 18 March 2002.
2. The rejection of claims 1-15 under 35 U.S.C. 103(a) has been removed as necessitated by amendment.
3. Claims 16-30 are pending. Claims 1-15 have been cancelled. Claims 16-30 are newly added claims. Claims 16, 17, 26, 27, 28, 29, and 30 are independent claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 is listed as being dependent upon itself. For the purpose of further prosecution, it will be assumed that claim 23 should be dependent upon claim 22.

Claims 24 and 25 are rejected for fully incorporating the deficiencies of the base claim from which they depend.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16, 26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. Patent 6,397,209 B1) in view of Yanase (U.S. Publication 2001/0025288 A1).

As per claims 16, 26, and 29, Reed discloses a computer readable medium, system and method comprising referring to term definition dictionary data including summary elements defined as elements to be extracted in order to be included in summaries (See Reed, Figure 2, element 2, and Column 3, lines 5-64). Reed also discloses a computer readable medium, system, and method including referring to term definition dictionary data including summary elements defined as elements to be extracted in order to be included in summaries (See Reed, Figure 2, element 2, and Column 3, lines 5-64), extracting the summary elements included in document data to be analyzed (See Reed, Column 4, lines 16-55), and linking a number of corresponding descriptions in the document data to be analyzed with the summary information (See Reed, Column 6, lines 13-20, lines 24-42, lines 59-60, and Column 2, lines 3-15). Reed

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does not disclose expressly that the extracted summary elements are combined in accordance with a predetermined rule to generate a number of summary information of the document data to be analyzed, where the summary information are combinations of the extracted summary elements. Yanase discloses a number of summary elements that are combinations of extracted summary elements, such as article titles and article text summary portions from multiple articles. Yanase discloses that that summary element are extracted based on predetermined rules, such as defining separators and spaces (See Yanase, Page 4, paragraphs 0079-0083, and Figure 8). Reed and Yanase are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the number of summary information made up of combinations of extracted summary elements that are extracted based on predetermined rules of Yanase with the system and method of Reed. The motivation for doing so would have been to determine the separation between various types of information within documents, such as titles and body of text (See Yanase, Page 4, paragraph 0080), and to allow the user to access additional document data which is not displayed on the screen due to a restricted display area (See Yanase, Page 6, paragraph 0116). Therefore, it would have been obvious to combine Yanase with Reed for the benefit of distinguishing between data segments within a document and accessing additional data within a document to obtain the invention as specified in claims 16, 26, and 29.

6. Claims 17-25, 27-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. Patent 6,397,209 B1) in view of Yanase (U.S. Publication 2001/0025288 A1), Thomson (U.S. Patent 5,634,051) and Chen (U.S. Patent 6,009,442).

As per claims 17, 27, and 30, Reed discloses a computer readable medium, system and method comprising referring to term definition dictionary data including summary elements defined as elements to be extracted in order to be included in summaries (See Reed, Figure 2, element 2, and Column 3, lines 5-64). Reed also discloses a computer readable medium, system, and method including referring to term definition dictionary data including summary elements defined as elements to be extracted in order to be included in summaries (See Reed, Figure 2, element 2, and Column 3, lines 5-64), extracting the summary elements included in document data to be analyzed (See Reed, Column 4, lines 16-55), and linking a number of corresponding descriptions in the document data to be analyzed with the summary information (See Reed, Column 6, lines 13-20, lines 24-42, lines 59-60, and Column 2, lines 3-15). Reed also discloses when a designation of the summary information from a user is received, searching the document data to be analyzed corresponding to the designated summary information based on a link result between the document data to be analyzed and the summary information (See Reed, Column 3, lines 5-8, lines 15-35, and Column 4, lines 56-65). Reed does not disclose expressly that the extracted summary elements are combined in accordance with a predetermined rule to generate a number of summary information of the document data to be analyzed, where the summary information are

combinations of the extracted summary elements. Reed also does not disclose expressly generating screen data including the designated summary information and the searched document data to be analyzed. Yanase discloses a number of summary elements that are combinations of extracted summary elements, such as article titles and article text summary portions from multiple articles. Yanase discloses that that summary element are extracted based on predetermined rules, such as defining separators and spaces (See Yanase, Page 4, paragraphs 0079-0083, and Figure 8). Thomson discloses generating screen data including the search document data, the category under which the searched document data falls, and a portion of the document as determined by the user. (See Thomson, Column 2, lines 65-67, Column 3, lines 1-3, and Figure 3). Chen discloses displaying document summary information resulting from a search. Reed, Yanase, Thomson and Chen are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the number of summary information made up of combinations of extracted summary elements that are extracted based on predetermined rules of Yanase with the system and method of Reed. The motivation for doing so would have been to determine the separation between various types of information within documents, such as titles and body of text (See Yanase, Page 4, paragraph 0080), and to allow the user to access additional document data which is not displayed on the screen due to a restricted display area (See Yanase, Page 6, paragraph 0116). It also would have been obvious to a person of ordinary skill in the art to include the search method and

generation of screen data of Thomson and Chen with the system and method of Reed. The motivation for doing so would have been to allow the user to enter a description of the information needed using simple words or phrases and to rely on the system to generate the full search query (See Thomson, Column 6, lines 35-46), subsequently displaying the results to the user on the screen including the summary data in order to allow the user to quickly and efficiently browse a collection of documents (See Chen, Column 2, lines 13-17). Therefore, it would have been obvious to combine Yanase, Thomson and Chen with Reed for the benefit of distinguishing between data segments within a document and accessing additional data within a document, and for allowing a user to enter information from which a full search is formulated and the results presented to the user to obtain the invention as specified in claims 17, 27, and 30.

As per claim 18, Reed, Yanase, Thomson and Chen disclose the limitations of claim 17 as described above. Thomson also discloses characterizing portions of the document data to be analyzed, which corresponds to the summary information, included in the screen data (See Thomson, Column 7, lines 52-53). Reed, Yanase, Thomson and Chen are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the characterized portions of the document data to be analyzed of Thomson with the system and method of Reed, Yanase, Thomson and Chen. The motivation for doing so would have been to allow the user to request to view a complete document selected from the list by inputting a command indicative of this request (See Thomson, Column 7, lines 53-57).

Therefore, it would have been obvious to combine Thomson with Reed, Yanase, Thomson and Chen for the benefit of allowing the user to request a complete document to obtain the invention as specified in claim 18.

As per claim 19, Reed, Yanase, Thomson and Chen disclose the limitations of claim 17 as described above. Thomson also discloses generating the screen data that makes the user hierarchically designate search keys for use in a search of the document data to be analyzed, searching the document data based on the search keys designated by the user, searching the summary information corresponding to the searched document data based on the link result between the document data and the summary information, and generating the screen data including the searched document data and the searched summary information (See Thomson, Column 6, lines 47-60, Column 2, lines 65-67, Column 3, lines 1-3, and Figure 3). Reed, Yanase, Thomson and Chen are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the hierarchical designation of search keys by the user of Thomson with the system and method of Reed, Yanase, Thomson, and Chen. The motivation for doing so would have been to allow the user to examine the search results in multiple formats (See Thomson, Column 2, lines 65-67, and Column 3, lines 1-3). Therefore, it would have been obvious to combine Thomson with Reed, Yanase, Thomson and Chen for the benefit of allowing the user to examine the search results in multiple formats to obtain the invention as specified in claim 19.

As per claims 20 and 21, Reed, Yanase, Thomson and Chen disclose the limitations of claim 19 as described above. Thomson also discloses, when a search key in an arbitrary hierarchy is designated by the user, generating the screen data that makes the user designate a next search key from a search key in a hierarchy of an order lower than the arbitrary hierarchy and the search key in the arbitrary hierarchy (See Thomson, Column 6, lines 63-64). Thomson also discloses, when a search key in an arbitrary hierarchy is designated by the user, searching the document data based on the search key designated in the arbitrary hierarchy and a search key designated in a hierarchy of an order higher than the arbitrary hierarchy before the arbitrary hierarchy is designated (See Thomson, Column 6, lines 61-62). Reed, Yanase, Thomson and Chen are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the designation of a next search key in a hierarchical order either lower or higher than the arbitrary hierarchy of Thomson with the system and method of Reed, Yanase, Thomson and Chen. The motivation for doing so would have been to allow the user to execute search strategies using a broader or narrower concept (See Thomson, Column 7, lines 23-26, and Column 6, lines 61-64). Therefore, it would have been obvious to combine Thomson with Reed, Yanase, Thomson, and Chen for the benefit of allowing the user to execute varying levels of concepts to search to obtain the invention as specified in claims 20 and 21.

As per claim 22, Reed, Yanase, Thomson and Chen disclose the limitations of claim 17 as described above. Reed also discloses including index information indicative

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of a category under which the document data falls (See Reed, Column 3, lines 5-8, and lines 15-35). Reed also discloses, when a designation of the category from the user is received, searching the document data that falls under the designated category based on the index information (See Reed, Column 3, lines 5-8, and lines 15-35), and searching the summary information corresponding to the searched document data based on the link result between the document data and the summary information (See Reed, Column 4, lines 56-65). Thomson also discloses generating the screen data including the searched document data, the category under which the searched document data falls, and the extracted summary information (See Reed, Column 3, lines 5-8, and lines 15-35). Reed, Yanase, Thomson and Chen are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the generation of screen data of Thomson with the system and method of Reed, Yanase, Thomson and Chen. The motivation for doing so would have been to allow the user to enter a description of the information needed using simple words or phrases and to rely on the system to generate the full search query (See Thomson, Column 6, lines 35-46). Therefore, it would have been obvious to combine Thomson with Reed, Yanase, Thomson and Chen for the benefit of allowing the user to enter a description of the information needed using simple words or phrases and to rely on the system to generate the full search query to obtain the invention as specified in claim 22.

As per claim 23, Reed, Yanase, Thomson and Chen disclose the limitations of claim 22 as described above. Thomson also discloses generating the screen data that makes the user hierarchically designate the category and the summary information, searching the document data that satisfies a search condition generated based on the designation from the user, and generating the screen data including the searched document data, the category under which the searched document data falls, and the searched summary information (See Thomson, Column 6, lines 47-60, Column 2, lines 65-67, Column 3, lines 1-3, and Figure 3). Reed, Yanase, Thomson and Chen are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the hierarchical designation of search keys by the user of Thomson with the system and method of Reed, Yanase, Thomson, and Chen. The motivation for doing so would have been to allow the user to examine the search results in multiple formats (See Thomson, Column 2, lines 65-67, and Column 3, lines 1-3). Therefore, it would have been obvious to combine Thomson with Reed, Yanase, Thomson and Chen for the benefit of allowing the user to examine the search results in multiple formats to obtain the invention as specified in claim 23.

Claim 24 is rejected on the same basis as claim 20

Claim 25 is rejected on the same basis as claim 21.

As per claim 28, Reed discloses a method of document analysis by a computer including receiving document data to be analyzed including index information indicative of a category under which the document data falls (See Reed, Column 3, lines 64-67,

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Column 4, lines 1-2, and Claim 4), referring to term definition dictionary data including summary elements defined as elements to be extracted in order to be included in summaries (See Reed, Figure 2, element 2, and Column 3, lines 59-64), extracting the summary elements included in document data to be analyzed (See Reed, Column 4, lines 16-55), linking a number of corresponding descriptions in the document data to be analyzed with the summary information (See Reed, Column 6, lines 13-20, lines 24-42, lines 59-60, and Column 2, lines 3-15), and, when a designation of the category from the user is received, searching the document data that falls under the designated category based on the index information, searching the summary information corresponding to the searched document data based on a link result between the document data and the summary information (See Reed, Column 3, lines 5-8, lines 15-35, and Column 4, lines 56-65). Reed does not disclose expressly combining the extracted summary elements in accordance with a predetermined rule and generating a number of summary information of the document data to be analyzed, and generating screen data including the searched document data, the category, and the searched summary information. Yanase discloses a number of summary elements that are combinations of extracted summary elements, such as article titles and article text summary portions from multiple articles. Yanase discloses that that summary element are extracted based on predetermined rules, such as defining separators and spaces (See Yanase, Page 4, paragraphs 0079-0083, and Figure 8). Thomson discloses generating screen data including the search document data, the category under which the searched document data falls, and a portion of the document as determined by the

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user. (See Thomson, Column 2, lines 65-67, Column 3, lines 1-3, and Figure 3). Chen discloses displaying document summary information resulting from a search. Reed, Yanase, Thomson and Chen are analogous art because they are from the same field of endeavor of processing and presenting electronic documents. At the time of the invention it would have been obvious to a person of ordinary skill in the art to include the number of summary information made up of combinations of extracted summary elements that are extracted based on predetermined rules of Yanase with the system and method of Reed. The motivation for doing so would have been to determine the separation between various types of information within documents, such as titles and body of text (See Yanase, Page 4, paragraph 0080), and to allow the user to access additional document data which is not displayed on the screen due to a restricted display area (See Yanase, Page 6, paragraph 0116). It also would have been obvious to a person of ordinary skill in the art to include the search method and generation of screen data of Thomson and Chen with the system and method of Reed. The motivation for doing so would have been to allow the user to enter a description of the information needed using simple words or phrases and to rely on the system to generate the full search query (See Thomson, Column 6, lines 35-46), subsequently displaying the results to the user on the screen including the summary data in order to allow the user to quickly and efficiently browse a collection of documents (See Chen, Column 2, lines 13-17). Therefore, it would have been obvious to combine Yanase, Thomson and Chen with Reed for the benefit of distinguishing between data segments within a document and accessing additional data within a document, and for allowing a

user to enter information from which a full search is formulated and the results presented to the user to obtain the invention as specified in claim 28.

Response to Arguments

7. Applicant's arguments filed 9 May 2005 have been fully considered but they are not persuasive.

Applicant argues on page 11 of the Instant Amendment that the references of record fail to disclose a plurality of summary information, where the plurality of summary information are combinations of the extracted summary elements. New claims 16-30 also clarify that the plurality of summary information is linked with a plurality of corresponding descriptions in document data. The Office maintains that the teachings of Reed, in combination with Yanase, disclose of the above listed limitations. Reed discloses that a number of summary structures can be stored in the summary structure database (See Reed, Column 3, lines 36-40), which shows one than one summary information. Yanase discloses that the summary information are combinations of extracted summary elements, as shown by Figure 8 of the Yanase disclosure, which lists multiple summary portions of two distinct articles. Reed further discloses linking the summary information with corresponding descriptions in the document data, in the form of keyword criteria (See Reed, Column 2, lines 3-15).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hurd II (U.S. Patent 6,222,535 B1) discloses
- McKeown discloses a system for personalized search and summarization over multimedia healthcare information.
- Radev discloses generating natural language summaries from multiple on-line sources.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR

William L. Bashore
WILLIAM BASHORE
PRIMARY EXAMINER
7/20/2005